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Birch Stewart Kolasch & Birch LLP P O Box 747 Falls Church, VA 22040-0747			HOYE, MICHAEL W	
			ART UNIT	PAPER NUMBER
			2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/617,036	PAIK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael W. Hoye	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 May 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 40-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 40-79 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 May 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/30/06</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on May 30, 2006 has been entered.

### ***Response to Arguments***

2. Applicants' arguments/remarks filed on May 30, 2006 have been fully considered but they are not persuasive.

Regarding the Tracton et al (USPN 6,470,378) reference, the Applicants' argue on page 16 that, "Tracton et al. only at most suggest the possibility of implementing a JavaScript cellular telephone browser client, for being served over a data pathway, but do not teach or suggest in any respect how to serve such a client on a mobile telephone network, which hardly qualifies as the broad characterization of a cellular telephony implementation upon which the Examiner has relied."

In response, the Examiner respectfully disagrees with the Applicants because Tracton et al clearly teaches that other architectures, including cellular-phone based browsers which receive broadcast content, are supported by adding the architectures to the JavaScript code, and Tracton further describes the server configuration for how to deliver content to a client (see col. 7, line 25

– col. 8, line 5). Therefore, since Tracton et al discloses the use of cellular-phone based browsers for receiving broadcasts, as well as corresponding server configurations, a cellular or mobile telephone network must be included in the overall system architecture.

Applicants' additional arguments with respect to claims 40-79 on pages 15-17 have been considered but are moot in view of the new grounds of rejection as presented below.

### ***Claim Objections***

3. Claims 53, 55 and 58 are objected to because of the following informalities:

- Claim 53 is dependent on claim 53, and should be dependent on claim --50--.
- Claim 55 is dependent on claim 53, and should be dependent on claim --54--.
- On lines 7 and 12 of claim 58, the word “mean” should be --means--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 40-43, 47-48 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Tracton et al (USPN 6,470,378).

Regarding claim 40, Tracton discloses a broadcasting service system (See Figure 4) for enabling the reception of television broadcasts via a mobile cellular telephone (col. 7, lines 26-53), comprising converting means (cols. 7-8, lines 62-5) for converting a television broadcast signal into a video and audio signal (col. 4, lines 33-49, which may include an encoded news broadcast, also see col. 7, lines 47-48) in a format compatible with a signal and transmission standard of a mobile cellular telephone network (col. 5, lines 58-62 and col. 7, lines 26-28). It is inherent or well known that a mobile cellular telephone network is wireless network, and Tracton discloses a system wherein the converting (col. 5, lines 58-62) means converts the television broadcast signal into a digital video and audio signal in a format compatible with the a signal and transmission standard of a mobile cellular telephone network (also see col. 6, lines 3-7). As previously stated above and in previous office actions, the Traction reference clearly discloses that the original source content 250 may be a MPEG encoded news broadcast or “television broadcast” that is sent to a server or “television [signal] receiver” which converts the signals into a format compatible with a signal and transmission standard of a mobile cellular telephone network as met by re-coding the MPEG-2 coding of the broadcast as a MPEG-1, MPEG-4, or other format/standard as needed for transmission to a cellular telephone or client based system (see col. 4, lines 33-49; col. 5, lines 58-62; col. 7, line 26 – col. 8, line 5). Further disclosed is a transmitting means (See Figure 9, 420), which transmits the converted video and audio signal to a mobile cellular telephone network subscriber (442) via a transmission channel of the mobile cellular telephone network (444), since Tracton discloses supporting cellular-phone based devices (col. 7, lines 25-27), which reads on the claimed mobile cellular telephone terminal.

Regarding claim 41, Tracton discloses the claimed television broadcast signal complies with a first signal standard for television broadcasting, the converted digital video and audio signal formats compatible with the mobile cellular telephone network comply with a second signal standard, and the first and second signal standards agree with a signal standard which is capable of converting between different transmission systems as described above (see col. 4, lines 33-49 and col. 7, lines 51-65).

Regarding claim 42, Tracton further discloses a system wherein the first signal standard is the MPEG-2 standard, and the second signal standard is the MPEG-4 standard (col. 4, lines 33-49).

Regarding claim 43, Tracton discloses a system as stated above in Claim 40. The claimed converting means comprises a transcoder which includes a decoding means which decodes digital video and audio data complying with a digital television broadcasting standard and then encodes the thusly decoded video and audio data into a format compatible with transmission over a communication channel of the mobile cellular telephone network, and converting-controlling means which controls an encoding rate of the transcoder to comply with a transmission rate of the mobile cellular telephone network is met by the server 100 and scaler 252, which transforms source content into a format compatible with transmission over a channel of the network, and also controls the encoding rate to comply with the network/terminal (see col. 5, lines 58-62 and col. 7, line 25 – col. 8, line 5).

Regarding claim 47, Tracton further discloses a system wherein the transmitting and converting means transmits data through a connected transmission channel (444) between a

mobile telephone subscriber terminal (442) and a base station (402) of the mobile cellular telephone network.

Regarding claim 48, Tracton further discloses a system wherein the converting and transmitting means transmit the video and audio signal through the communication network (444). It is inherent that at least one transmission channel be allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port).

Regarding claim 50, Tracton discloses a mobile telephony terminal (col. 7, lines 26-28) comprising a digital video and audio data reception means (See Figure 4, 112), a decoding means (106), which decodes the received digital video and audio data received from the digital video and audio data reception means, and an outputting means which outputs the decoded video and audio signal (col. 9, lines 6-20), as stated above in Claim 40.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tracton et al., in view of Margulis (USPN 6,263,503).

Regarding claim 44, Tracton discloses a system as stated above in claim 40. Tracton does not explicitly disclose the converting means includes a digital signal converting means

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which converts an analog television broadcast signal into digital video and audio data...

Margulis discloses a wireless television system (See Figure 1) that accepts a variety of inputs including analog audio/video (122 and 128). The input is then processed into a format that is compatible with the wireless client (col. 7, lines 36-44). The analog data is further digitized during this process (col. 7, lines 54-56). Therefore it would have been obvious to one of ordinary skill in the art to have combined the Tracton reference with the analog television broadcast conversion to digital capabilities of the Margulis reference for the advantage of providing the capability to convert analog broadcasts to digital and transmit the broadcasts over a mobile cellular telephone network. One of ordinary skill in the art would have been led to make such a modification since it is well known to convert analog broadcasts to digital in the art of television broadcasting. The Tracton reference teaches the additional claim limitations as previously described above in claim 43.

Regarding Claim 45, Tracton in view of Margulis discloses the claimed transmitting means includes a means for putting the formatted digital video and audio signal onto a transmission channel of the mobile cellular telephone network, and a formatting-transmission means which formats and transmits the digital video and audio data with additional broadcasting information as described in the sections of Traction cited above in claim 43 (also see col. 6, lines 3-7), in addition Tracton discloses a transmitting means (See Figure 9, 420), which transmits the converted video and audio signals to a subscriber terminal (442) through a certain transmission channel of the mobile communication network (444).

Regarding Claim 46, Tracton does not disclose a broadcasting service system wherein EPG data is formatted and transmitted with the video and audio data with additional broadcasting

information. Margulis discloses a wireless television system as described above. Margulis further discloses that EPG data is embedded in the television broadcast (col. 4, lines 44-55). This reads on the claimed EPG data is formatted and transmitted with the video and audio data and additional information. Margulis is evidence that ordinary workers in the art would appreciate the benefit of broadcasting TV data combined with EPG data to a portable display device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have further modified the system of Tracton with the television source and EPG data of Margulis in order to allow a user easy access to a wide variety of programming when a regular television is not accessible and provide the additional benefits associated with an EPG.

8. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tracton et al., in view of Peters et al. (USPN 6,246,430).

Regarding Claim 49, Tracton discloses a system as stated above in Claim 40. What is not disclosed however is the inclusion of an identifying means that identifies an individual mobile cellular telephone subscriber from among all subscribers of the mobile cellular telephone network, and a payment-demanding means that demands a payment corresponding to reception of the A/V signal for the identified subscriber. Peters discloses a video telephone system (See Figure 2) with a video *server* (col. 2, lines 32-34). The users of the video telephone must insert a chip-card into the video telephone, thereby identifying themselves to the device (col. 4, lines 1-12). A subsequent charge is issued for the purchase (col. 4, Line 14-16). Peters is evidence that ordinary workers in the art would

appreciate the ability to identify an individual subscriber and charge for services in a video telephone system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Tracton with the identification and charging of Peters in order to implement pay-per-view type services on a wireless video transmission system.

9. Claims 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tracton et al., in view of Margulis, in further in view of Legall et al. (USPN 6,005,565).

Regarding Claim 51, Tracton discloses a mobile telephony terminal (col. 7, lines 26-28) as stated above in Claim 51. What Tracton does not disclose, however, is the mobile cellular telephone terminal includes a receiving-decoding means which receives and decodes an EPG signal from a converted television broadcast signal transmitted through the mobile cellular telephone network. Margulis discloses a wireless television system (See Figure 1) that accepts a variety of inputs including analog audio/video (122 and 128) including a cable TV signal that is received by a cable decoder (col. 4, lines 22-29). The input is then processed into a format that is compatible with the wireless client (col. 7, lines 36-44). The analog data is further digitized during this process (col. 7, lines 54-56). EPG data is embedded in the television broadcast (col. 4, lines 44-55). It is inherent that the client be able to receive and decode the EPG signal in order to display it to the user, Margulis is evidence that ordinary workers in the art would appreciate the benefit of broadcasting TV data combined with EPG data to a portable display device. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention

was made to modify the system of Tracton with the television source and EPG data of Margulis in order to allow a user easy access to a wide variety of programming when a regular television is not accessible.

What Tracton in view of Margulis do not disclose, however, is a transmitting means which transmits a television channel selection request based upon the decoded EPG data to the mobile cellular telephone network. Legall discloses an EPG system (See Figure 2) where a user is able to search the EPG and other sources of information (col. 2, lines 60-66) by issuing a search request to a search engine, which interacts with external information resources such as the Internet or broadcasts (col. 3, lines 11-16). Further the system is operable to "offload" the handling of a search to the content provider so the receiving user's system does not have to perform the search (col. 5, lines 44-46). This reads on the claimed transmitting means which transmits a television channel selection request based upon the decoded EPG data... Legall is evidence that ordinary workers in the art would appreciate the ability to search an EPG. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Tracton in view of Margulis with the EPG searching of Legall in order to allow a user to quickly locate information of interest.

Regarding claim 52, Tracton further discloses a mobile telephony terminal wherein the mobile telephony terminal is a cellular phone (col. 7, Line 27).

Regarding Claim 53, Tracton also discloses the mobile telephony terminal includes a browser (col. 7, lines 26-28) and a web server (col. 5, lines 16-19). Further, Tracton in view of Margulis, in further view of Legall disclose a system wherein EPG data is

transmitted to the client as stated above. The combination of Tracton, Margulis and Legall would therefore disclose the utilization of the web server and browser to access and search the EPG data and additional information transmitted from the mobile cellular telephone network.

10. Claims 54-65 and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, in view of Kumar (USPN 2006/0105804).

Regarding Claim 54, Margulis discloses a broadcasting service system (See Figure 1) using a mobile communication terminal (158) comprising a digital video and audio input means (122, 128, 134), which receives digital A/V signals broadcast from a provider of the pertinent information, a transcoding means for converting the digital video and audio signals into a format and transmission rate agreeable to a radio mobile communication system (col. 7, lines 36-64) and a transmitting means (156) for outputting and transmitting the transcoded-converted digital broadcast signals. It is inherent that at least one transmission channel be allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port). Margulis does not explicitly disclose the use of a “mobile cellular telephone network”. However, Margulis does disclose that in alternate embodiments, remote TV 158 may be implemented as a personal digital assistant (PDA) device, a note pad personal computer or any other desired display device (col. 5, lines 27-34). In addition to, Kumar teaches the use of “smart cell phones” which are devices that combine the capabilities of cell phones and electronic organizers (i.e. PDAs, see pg. 1 [0004] and [0008], also see pg.

2 [0022]-[0025]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the invention of Margulis with the cell phone/PDA device of Kumar for the advantage of integrating the features and capabilities of a cell phone with the additional features and capabilities of a PDA into a signal integrated device which is well known to those of ordinary skill in the art.

Regarding claim 55, Margulis in view of Kumar disclose a system as stated above in claim 54. Margulis further discloses that the broadcasting service system includes EPG and additional data converting means that convert EPG data and additional information for selecting a digital broadcast channel into a format compatible with the mobile communication system (col. 4, lines 44-55 and col. 7, lines 36-64).

Regarding Claim 56, Margulis in view of Kumar disclose a system as stated above in Claim 54. Margulis further discloses that the broadcasting service system transmits the EPG data and additional information as the agreeable/compatible format to the mobile communication system (col. 4, lines 51-55 and col. 7, lines 36-64).

Regarding Claim 57, Margulis in view of Kumar discloses a system as stated above in Claim 54. The EPG data converting means inherently includes a decoder or decoding means which decodes the inputted EPG stream of the digital broadcast signals. Further, it is inherent that there be a restoring means for retrieving the decoded EPG data in order to broadcast it to the users. In any digital system where data conversion occurs, there is inherently a memory (See Figure 6) that is used to store data to be processed. This reads on the claimed database means that stores the information corresponding to the restored EPG data. Further Margolis discloses an EPG outputting means that outputs the EPG

information from the data base corresponding to a subscriber request and a converting means that converts the additional information of the digital broadcast into a format agreeable to the mobile radio communication system (col. 4, lines 51-55).

Regarding Claim 58, Margulis discloses a broadcasting service system (See Figure 1) using mobile subscriber terminal (158) comprising a DSP means for receiving a digital broadcast signal and providing a broadcast program to a mobile communication network/system (col. 5, lines 15-19). Further disclosed is a media storage means (see Figure 6, 646) for storing the broadcast program processed by the digital signal-processing means (518). Further disclosed is a data processing and converting means for converting the EPG data and additional information processed by the DSP means into a signal format compatible with the mobile network/system as stated above in claims 54-57. Further disclosed is a transcoder (cols. 7-8, lines 36-10 and col. 8, lines 44-55) and transmission means (156) for receiving the A/V signals of the broadcast and additional information processed by the DSP means and converting it into a signal format compatible with the mobile...network/system and outputting it. As previously stated above in claim 54, Margulis does not explicitly disclose the use of a “mobile cellular telephone network”. However, Margulis does disclose that in alternate embodiments, remote TV 158 may be implemented as a personal digital assistant (PDA) device, a note pad personal computer or any other desired display device (col. 5, lines 27-34). In addition to, Kumar teaches the use of “smart cell phones” which are devices that combine the capabilities of cell phones and electronic organizers (i.e. PDAs, see pg. 1 [0004] and [0008], also see pg. 2 [0022]-[0025]). Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to have modified the invention of Margulis with the cell phone/PDA device of Kumar for the advantage of integrating the features and capabilities of a cell phone with the additional features and capabilities of a PDA into a signal integrated device which is well known to those of ordinary skill in the art.

Regarding Claim 59, Margulis in view of Kumar disclose a system as stated above in Claim 58. Margulis further discloses that the DSP means includes a tuner (120, 132) for selecting the digital broadcast signal received from the transmission medium such as a television broadcast (128), satellite broadcast (134) and cable broadcast (122). It is inherent that these tuners have a demodulating means (612) for restoring the selected digital broadcast signal. Further disclosed is a demultiplexer (col. 11, lines 42-46) for fetching the EPG and additional information from the demodulated signal, and a decoder for decoding the A/V signals (See Figure 5, 538).

Regarding Claim 60, Margulis in view of Kumar disclose a system as stated above in claim 58. Margulis discloses that the data processing and converting means includes an EPG and additional information data decoding means as stated above in Claim 57. Further, Margulis discloses a signal converter, or converting means, as stated above in Claim 57. It is inherent that the signal conversion means have a protocol converting means for converting the converted EPG data into a protocol compatible with the mobile communication system in order for the client to be able to receive the EPG and additional information data.

Regarding Claim 61, Margulis in view of Kumar disclose a system as stated above in Claim 58. Margulis further discloses that the transcoder and transmission means include a transcoder (538) for transcoding the digital broadcast A/V signal into a format agreed with

the mobile communication system. Further Margulis as combined with Kumar discloses a system that reduces the bit rate of the A/V data (col. 7, lines 65-67). This reads on the claimed transmission rate control means for controlling the transmission rate agreeable to the mobile network. Further it is inherent that there be a converting means for converting the output of the data processing and converting means into a data protocol agreeable to the network in order for the clients to be able to receive the data properly. It is further inherent in such a digital system that there be a synchronization processing means for synchronizing information during transcoding and protocol converting such that time-based data be delivered in the appropriate order to the viewers. Further disclosed is a transmitting means (156) for transmitting the data in real time over the network/system. It is inherent that at least one transmission channel be allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port).

Regarding Claim 62, Margulis in view of Kumar discloses a broadcast service method using a mobile communication terminal as stated above. Further disclosed is converting a broadcast signal including digital video and audio data into a format agreed with a signal and transmission standard of the mobile communication system and transmitting the data to a subscriber through a certain transmission channel of the mobile communication system as stated above. Margulis further discloses formatting and multiplexing EPG data together with the transmitted video and audio data as stated above in Claim 40.

Regarding Claim 63, Margulis in view of Kumar disclose a method as stated above in Claim 62. Margulis as combined with Kumar further discloses that the converting

process includes the steps of converting A/V data of a digital broadcast into a data format agreeable to the standard and transmission rate of the mobile communications system as stated above and converting the EPG data and additional information as stated above.

Regarding Claim 64, Margulis in view of Kumar disclose a method as stated above in Claim 62. Margulis further discloses that the transmission process includes the steps of synchronization of the converted digital A/V data, EPG data and additional information as stated above. Further disclosed is converting the data into a protocol agreeable to the mobile communication network/system and allotting a certain transmission channel and putting the digital data corresponding to the protocol of the system on the channel as stated above.

Regarding Claim 65, Margulis discloses a broadcasting service method using a mobile subscriber terminal as stated above comprising transmitting a TV broadcast signal having multiplexed EPG data to a subscriber through a mobile communication system as stated above. It is inherent in such systems that the EPG data may be transparently pushed to the subscriber's terminal or downloaded upon request. Further, it is well known in the art that a channel may be selected by searching EPG data. Margulis also discloses converting the A/V data of a selected channel into the data agreed with the standard of the mobile communications system and transmitting the data through the channel of the system as stated above. It is inherent that at least one transmission channel be allotted for transmission of data, be it a physical channel (e.g. range of RF bandwidth) or a virtual channel on a digital transmission medium (e.g. TCP/IP port). As previously stated above, Margulis does not explicitly disclose the use of a "mobile cellular telephone subscriber

terminal and/or network". However, Margulis does disclose that in alternate embodiments, remote TV 158 may be implemented as a personal digital assistant (PDA) device, a note pad personal computer or any other desired display device (col. 5, lines 27-34). In addition to, Kumar teaches the use of "smart cell phones" which are devices that combine the capabilities of cell phones and electronic organizers (i.e. PDAs, see pg. 1 [0004] and [0008], also see pg. 2 [0022]-[0025]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the invention of Margulis with the cell phone/PDA device of Kumar for the advantage of integrating the features and capabilities of a cell phone with the additional features and capabilities of a PDA into a signal integrated device which is well known to those of ordinary skill in the art.

Regarding Claims 69-70, Margulis discloses a broadcasting service system using a mobile subscriber/communication terminal as stated above comprising an analog broadcasting reception means which receives an analog television broadcasting system as stated above. Further disclosed is a digital converting means which converts the analog broadcasting signal received by the analog broadcasting reception means into a digital signal as stated above. Margulis further discloses that the system includes an EPG signal and additional information abstracting means for abstracting the EPG signal and additional information and an encoding-converting means for converting the EPG signal and additional information into a signal agreeing with the mobile communication network/system as stated above. An encoding-converting mean is disclosed which converts the digital broadcasting signal converted by the digital converting means into a signal agreed with the mobile radio

communication network/system and an allotting-transmitting means is disclosed which allots the converted digital broadcast signal by the encoding-converting means on the certain transmission channel of the system and transmits it as is stated above. Also, as previously stated above, Margulis does not explicitly disclose the use of a “mobile cellular telephone subscriber terminal and/or network”. However, Margulis does disclose that in alternate embodiments, remote TV 158 may be implemented as a personal digital assistant (PDA) device, a note pad personal computer or any other desired display device (col. 5, lines 27-34). In addition to, Kumar teaches the use of “smart cell phones” which are devices that combine the capabilities of cell phones and electronic organizers (i.e. PDAs, see pg. 1 [0004] and [0008], also see pg. 2 [0022]-[0025]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the invention of Margulis with the cell phone/PDA device of Kumar for the advantage of integrating the features and capabilities of a cell phone with the additional features and capabilities of a PDA into a signal integrated device which is well known to those of ordinary skill in the art.

11. Claims 66-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, in view of Kumar, in further view of Peters et al.

Regarding Claims 66-68, Margulis in view of Kumar disclose a method as stated above in Claim 65. What is not disclosed, however, is a method wherein a right for watching the digital broadcast is granted to a subscriber and the EPG information is provided to the subscriber after confirming and certifying the right. Peters discloses a video

telephone system (See Figure 2) with a video server (col. 2, lines 32-34). The users of the video telephone must insert a chip-card into the video telephone, thereby identifying themselves to the device (col. 4, lines 1-12). A subsequent charge is issued for the purchase (col. 4, Line 14-16). This reads on the claimed right for watching the digital broadcast is granted to the subscriber. If the user does not authenticate, the video telephone unit remains locked (col. 4, Line 4). This reads on the claimed providing information to the subscriber after confirming and certifying the right. Peters is evidence that ordinary workers in the art would appreciate the ability to restrict access to content based on subscriber identification and payment in a wireless television system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Margulis in view of Kumar with the identification, payment and privileges of Peters in order to prevent unauthorized access to certain content in a video telephone system.

12. Claims 71-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis, in view of Kumar, and further in view of Tracton et al.

Regarding Claims 71-72, Margulis in view of Kumar disclose a system as stated above in Claim 69 as well as claim 70. What is not disclosed, however, is the use of the MPEG 4 format. Tracton discloses a system wherein data sent to the mobile communication network is in the MPEG 4 format (col. 4, lines 45-49). Tracton is evidence that ordinary workers in the art would recognize the benefits of using the low bit-rate MPEG 4 format in a limited bandwidth network. Therefore, it would have been obvious to

one having ordinary skill in the art at the time the invention was made to modify the system of Margulis in view of Kumar with the MPEG 4 format of Tracton in order to further conserve bandwidth.

Regarding Claim 73, Margulis discloses a mobile communications subscriber terminal as stated above comprising a TV broadcasting reception means (See Figure 7, 724), that receives a broadcasting signal that includes motion picture information as stated above. Further disclosed is a decoding means (732), which restores the received broadcast signal by the broadcasting reception means. An outputting means is disclosed (212) which outputs the restored broadcast signal by the decoding means for being watched on the mobile radio communication system. A selecting means (See Figure 3, 312) is disclosed for selecting the broadcasting signal reception mode.

What is not disclosed, however, is a communication processing means that receives a call signal provided to the mobile cellular telephone network and restore-outputs the call signal, and coding-outputs a subscriber call signal through the mobile cellular telephone network. Kumar discloses the use of “smart cell phones” which are devices that combine the capabilities of cell phones and electronic organizers (i.e. PDAs, see pg. 1 [0004] and [0008], also see pg. 2 [0022]-[0025]) as previously described above. In addition to, Tracton discloses a mobile A/V reception device as stated above that may be incorporated into a cellular phone (col. 7, lines 26-28). It is inherent in such phones that there be a communication processing means as claimed above. Further, in a cellular phone enabled with mobile video reception, a selection means for selecting broadcast signal mode or mobile communication telephone call mode is inherent. Kumar and Tracton are evidence

that ordinary workers in the art would recognize the benefits of using a cellular phone platform in a mobile communication subscriber terminal with video reception. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Margulis in view of Kumar with the communication processing means and selection means of Tracton in order to provide phone service as part of the mobile cellular telephone subscriber terminal.

Regarding Claim 74, Margulis in view of Kumar, and further in view of Tracton disclose a system as stated above in Claim 73. Margulis further discloses a system wherein the broadcast reception means includes an antenna (720) and a tuner (724), the decoder includes demodulation means (732) for demodulating video and audio signals of an analog television broadcasting signal selected from the tuner, and an outputting means includes a speaker (770) for outputting the demodulated audio signal and the mobile communication terminal (212) for displaying the demodulated video signal when the broadcast signal is an analog television broadcast signal.

Regarding Claim 75, Margulis in view of Kumar, and further in view of Tracton disclose a system as stated above in Claim 73. Margulis further discloses a terminal wherein the broadcasting reception unit includes a bit stream reception means (720) for receiving a bit stream from a terminal antenna and a digital broadcast signal, the decoder (732) includes a demodulation and restoring means (724) for demodulating video and audio signals of the digital broadcast signal and restoring the demodulated video and audio signals, and the outputting means (770) includes a speaker for outputting the restored audio

signal on a monitor (212) for displaying the restored video signal on the mobile communication terminal when the broadcast signal is the digital broadcast signal.

Regarding Claims 76-78, Margulis in view of Kumar, and further in view of Tracton disclose a system as stated above in Claims 73-74 respectively. Tracton further discloses that the mobile communication subscriber terminal is a cellular phone as previously stated above.

13. Claim 79 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tracton et al, in view of Peters, and in further view of Margulis.

Regarding claim 79, the claim is rejected based on the combination of the Tracton, Peters, and Margulis references, as previously described above in the rejection of claims 40, 49 and 46, which are related in a similar manner to the limitations of claim 79.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kang et al. (KR 97055875 A) – Discloses a cellular phone which also serves as a television.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

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Michael W. Hoye  
August 16, 2006



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